

## IN THE CLAIMS

Please amend the claims as follows:

Claim 1-5 (Canceled).

Claim 6 (New): An automated synthesis apparatus for carrying out chemical reactions with reflux cooling comprising:

one or more reactor modules each having one reactor;

one or more feed vessels each for a liquid reactant or reactant mixture; and

one or more metering and feed devices for introduction of liquid reactant or reactant mixture from the one or more feed vessel into the one or more reactors,

wherein each reactor includes a lid configured as a hollow body to enclose a hollow space, with an inlet line and an outlet line for a heat transfer medium into or out of the hollow space and with one or more through-lines for introduction of each liquid reactant mixture into the reactor.

Claim 7 (New): An automated synthesis apparatus as claimed in claim 6, wherein the lid is flat.

Claim 8 (New): An automated synthesis apparatus as claimed in claim 7, wherein the lid is configured as a flat disk.

Claim 9 (New): An automated synthesis apparatus as claimed in claim 6, wherein the inlet line for the heat transfer medium projects into the hollow space of the lid and/or the outlet line for the heat transfer medium ends flush with an interior wall of the lid enclosing the hollow space.

Claim 10 (New): An automated synthesis apparatus as claimed in claim 6, wherein the one or more through-lines project beyond a lower edge of the lid into the interior space of the reactor.

Claim 11 (New): An automated synthesis apparatus as claimed in claim 6, wherein the lid has an increased cross section at its underside and at its upper side.